

**03050109-120**  
**(Reedy River)**

### **General Description**

Watershed 03050109-120 is located in Greenville and Laurens Counties and consists primarily of the *Reedy River* and its tributaries from Huff Creek to Lake Greenwood. The watershed occupies 70,013 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Madison-Davidson-Pacolet-Wilkes series. The erodibility of the soil (K) averages 0.26; the slope of the terrain averages 15%, with a range of 2-40%. Land use/land cover in the watershed includes: 0.21% urban land, 16.34% agricultural land, 8.62% scrub/shrub land, 0.60% barren land, 73.53% forested land, and 0.70% water.

This section of the Reedy River accepts drainage from the upper Reedy River watershed (03050109-100), Martin Creek, and Horse Creek before flowing into and through Boyd Mill Pond. The river then accepts the drainage from Walnut Creek and forms an arm of Lake Greenwood. There are a total of 154.3 stream miles in this watershed, all classified FW.

### **Water Quality**

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-862	BIO	FW	HORSE CREEK AT SR 69
S-070	W	FW	REEDY RIVER AT US 76
S-311	S	FW	BOYD MILL POND .5 MI W OF DAM
S-861	BIO	FW	WALNUT CREEK AT SR 64
S-021	P	FW	REEDY RIVER AT S-30-06, E OF WARE SHOALS
S-308	W	FW	LK GREENWOOD, REEDY R.ARM, 150YDS ABOVE RABON CK

**Reedy River** - There are two SCDHEC monitoring sites along this section of the Reedy River, which was Class B until April, 1992. Aquatic life uses are fully supported at the upstream site (S-070). Aquatic life uses are again fully supported at the downstream site (S-021), but there is a significant decreasing trend in pH and a significant increasing trend in turbidity. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus and total nitrogen concentrations suggest improving conditions for these parameters. Recreational uses are partially supported at both sites due to fecal coliform bacteria excursions, and a significant increasing trend in fecal coliform bacteria was noted at the downstream site.

**Horse Creek (S-862)** - This stream was Class B until April, 1992. Aquatic life uses are fully supported based on macroinvertebrate community data.

**Boyd Mill Pond (S-311)** - Boyd Mill Pond is a 182-acre impoundment on the Reedy River, with a maximum depth of approximately 9.5m and an average depth of approximately 3.7m. The lake's watershed comprises 627.8km<sup>2</sup>. Eutrophication assessments indicate that Boyd Mill Pond is among the most eutrophic small lakes in South Carolina, characterized by high densities of algae and high nutrient concentrations. Watershed management is recommended to reduce phosphorus loading to this lake.

This lake was Class B until April, 1992. Aquatic life uses are not supported due to pH excursions and eutrophication. In addition, there is a significant increasing trend in turbidity. Significant decreasing trends in pH and total phosphorus and total nitrogen concentrations suggest improving conditions for these parameters. Recreational uses are fully supported, but there is a significant increasing trend in fecal coliform bacteria.

**Walnut Creek (S-861)** - This stream was Class B until April, 1992. Aquatic life uses are fully supported based on macroinvertebrate community data.

**Reedy River Arm of Lake Greenwood (S-308)** - Eutrophication assessments indicate that the Reedy River arm of Lake Greenwood is among the most eutrophic lake embayments in the state, characterized by high densities of algae and high phosphorus concentrations. Watershed management is recommended to reduce phosphorus loading to this area of the lake. Aquatic life uses are partially supported due to pH excursions and impaired by eutrophic conditions. Recreational uses are fully supported.

## **Permitted Activities**

### **Point Source Contributions**

<b>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT</b>	<b>NPDES# TYPE LIMITATION</b>
REEDY RIVER WR GRACE & CO./MADDEN-KERNELLS MINE PIPE #: 001 FLOW: 0.1-0.2	SCG730035 MINOR INDUSTRIAL EFFLUENT
HORSE CREEK VULCAN MATERIALS CO./PRINCETON QUARRY PIPE #: 001 FLOW: M/R	PROPOSED MINOR INDUSTRIAL EFFLUENT

### **Mining Activities**

<b>MINING COMPANY MINE NAME</b>	<b>PERMIT # MINERAL</b>
WR GRACE & CO. MADDEN-KERNELLS MINE	0565-30 VERMICULITE

## **Growth Potential**

There is generally a low potential for growth in this watershed. Some growth could result from the crossing of US 76 to the City of Laurens and from US 25 to the City of Greenville. Medium density residential areas should expand along the river in Laurens County.